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USEFUL GUN THREADS FOR RESTORATION WORK

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HAVE

		IMPERIAL DIMENSIONS					METRIC DIMENSIONS					Notes				
Type	SIZE	dia	T.P.I	CLR	TAP	dia	Pitch	CLR	root	Tap	Angle			Tap	Die	
B.A.	10	0.689	72.6		0.051	1.700	0.350	2	1.28	1.30	47.5					
B.A.	9	0.748	65.1		0.063	1.900	0.390	2.2	1.43	1.60	47.5					
ISO	M2	0.0787			0.063	2.000	0.400	2.3		1.60	60					
B.A.	8	0.0866	59.17		0.067	2.200	0.430	2.5	1.68	1.70	47.5					
DIM 3/32nd	>>>>>	0.0938			2.383											
B.A.	7	0.0984	52.91		0.079	2.499	0.480	2.8	1.92	2.00	47.5					
ISO F	M2.5	0.0984	72.56		0.083	2.500	0.350	2.9		2.10	60					
ISO C	M2.5	0.0984	56.44			2.500	0.450	2.9	2.05	2.10	60					
UNF	No. 3	0.099	56		0.079	2.515	0.454	2.8	2.00	2.00	60					
UNC	No. 3	0.099	48		0.079	2.515	0.529	2.8	2.00	2.00	60					
B.A.	6	0.1102	47.85		0.091	2.799	0.530	3.2	2.16	2.30	47.5					
UNF	No. 4	0.112	48		0.094	2.845	0.529	3.2		2.40	60					
UNC	No. 4	0.112	40		0.094	2.845	0.635	3.2		2.40	60					
ISO F	M3	0.1181	72.56		0.102	3.000	0.350	3.4		2.60	60					
ISO C	M3	0.1181	50.8	0.098	0.098	3.000	0.500	3.4	2.50	2.50	60					
DIM 1/8th	>>>>>>	0.125			0.006	3.175										
UNF	No. 5	0.125	44	0.106	0.106	3.175	0.577		2.70	2.70	60					
UNC	No. 5	0.125	40	0.102	0.102	3.175	0.635		2.60	2.60	60					
BSW	1/8th	0.125	40		0.098	3.175	0.635			2.50	55					
B.A.	5	0.126	43.1	0.098	0.102	3.200	0.589		2.49	2.60	47.5					
ISO F	M3.5	0.1378	72.57		0.126	3.500	0.350			3.20	60					
ISO C	M3.5	0.1378	42.33		0.114	3.500	0.600			2.90	60					
UNF	No. 6	0.138	40	0.114	0.114	3.505	0.635		2.90	2.90	60					
UNC	No. 6	0.138	32		0.112	3.505	0.794		2.85	2.85	60					
B.A.	4	0.1417	38.46		0.111	3.599	0.660		2.81	3.10	47.5					

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DIM 5/16th	>>>>>>	0.3125				7.938								
BSF	5/16th	0.3125	22		0.268	7.938	1.155			6.80	55			
BSW	5/16th	0.3125	18		0.256	7.938	1.411			6.50	55			
BSB	5/16th	0.3125	26		0.276	7.938	0.977			7.00				
UNF	5/16th	0.3125	24			7.938	1.058			6.80				
UNC	5/16th	0.3125	18			7.938	1.411			6.60				
ISO F	M8	0.3149	25.4			8.000	1.000	9		7.25	60			
ISO C	M8	0.3149			0.268	8.000	1.250	9	6.80	7.00	60			
AS str. Pipe	1/8th	0.3782	27			9.606								
BSPP	1/8th	0.383	28			9.728				8.60				

Brass threads are all 26 t.p.i. as are British Standard Cycle threads. Model Engineer threads are available in 40 or 32 t.p.i from 1/8 to 1/2 dia.

Early threads were made from hand made die plates and taps that were derived from earlier generations of handmade dies and taps so that the diameters tended to vary considerably and the pitch was not standard.

A degree of standardisation was beginning to be implemented from late 18th early 19th century and percussion guns are likely to have threads similar to modern BSF or UNF and Whitworth or UNC threads – you'll find those threads are quite common on British guns, but often the diameter is a bit out..

The thread profiles was almost always different from modern threads – thread angles were shallower and the tops and bottoms of the threads were almost always much more rounded than modern threads, but provided the part you have made is not hardened it will usually form itself to fit.